

## **Modeling Soil Behaviour During Subsoiling**

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CSBE08170

Information on soil strength following subsoiling is very important to the evaluation of the performance of subsoilers and to the design and selection of subsoilers. A discrete element model was developed to simulate the soil strength following subsoiling. A commercial discrete element code, Particle Flow Code in Three Dimension (PFC<sup>3D</sup>), was used to compute the model. The main model outputs are the lateral and vertical distributions of soil cone index following subsoiling. Currently, the model is being developed and it is expected to be finished shortly. Following the model development, model validations will be performed against the existing field measurements of soil cone indices resulting from subsoiling. Those field measurements were taken from a clay soil in 2006 and 2007. All these activities will be finished shortly and the results will be presented at the CSBE Conference.